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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,193	11/18/2003	Hong-Chi Teng	Y4P3008	3343

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EXAMINER

DANIELSEN, NATHAN ANDREW

ART UNIT PAPER NUMBER

2627

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,193	Applicant(s) TENG, HONG-CHI	
	Examiner Nathan Danielsen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 6-9 are pending. Claims 1-5 have been cancelled in Applicant's amendment dated 27 February 2006.

Specification

2. The abstract of the disclosure is objected to because "a movement for disk player" should be --a read head moving mechanism--. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: all instances of "movement for disk player" should be changed to --read head moving mechanism--, "CD-ROM play6er, DVD-ROM player, CD-RW player, VCD player, DVD player, or NP3 player" (page 1, lines 6-7) should be --CD-ROM player, DVD-ROM player, CD-RW player, VCD player, DVD player, or MP3 player--, and "big-sized" (page 1, lines 10 and 12) should be --large-sized--. Appropriate correction is required.
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Read Head Moving Mechanism for an Optical Disk Player.

Claim Objections

5. Claims 6-9 are objected to because of the multiple informalities, of which the following are examples: "movement for disk player" should be --read head moving mechanism--. Claim 6 is further objected to because "ferrite substrate." should be --ferrite substrate;--, "and a second gear meshed between" should be --a second gear located between--, and "said first rail inserts" should be --said first rail is inserted--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 6 recites the limitation "thereby, rotation of said second gear will drive the rack and thus the drive the first rail; said first rail is engaged to the driving head". The specification and drawings fail to show where the rack drives the stationary rail 22. Does Applicant mean --whereby rotation of said second gear will drive the rack along the first rail; wherein said rack is engaged to the driving head--?

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitations "a second gear meshed between said first gear and said rack" and "the second gear is in contact with a spindle of the first gear". These limitations render this claim indefinite because the word "meshed" indicates that the teeth of one gear are in contact with those of another gear. However, none of the drawings show any teeth on the spindle of the first gear 211, nor do they show where the first gear 211 is in contact or "meshed" with the second gear 231. Claim 6 recites the limitation "the driving head" in line 17. There is insufficient antecedent basis for this limitation in the claim. Does Applicant mean --the disk read head--? Claims 7-9 are rejected as being dependent on a rejected base claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (hereinafter Lu) (US Patent Application Publication 2004/0205793), in view of Watanabe et al (hereinafter Watanabe) (US Patent 6,151,284), and further in view of the Applicant's admitted prior art (hereinafter the AAPA).

Regarding claim 6, Lu discloses a movement for disk player comprising:

a disk read head (optical pickup head 5 in figure 4);

a read head moving mechanism (element A in figure 7 as shown below); and

a disk driving motor (element B, mounted on the opposite side of the line, in figure 7);

wherein said moving mechanism comprising a driving source (element C in figure 7), a

first gear coupled to said driving source (element D in figure 7), a first rail

(principle guide rod 8 in figure 7) and a second rail (secondary guide rod 9 in

figure 7), a rack mounted on said first rail (element E in figure 7), and a second

gear (element F in figure 7) meshed between said first gear and said rack; and

the second gear is in contact with a spindle of the first gear (element G in figure 7);

wherein one lateral side of said rack has a plurality of teeth (element H in figure 7); said

teeth of the rack is engaged to said second gear; and another side of said rack

having two holes (elements I and J in figure 7); said first rail inserts into said two

holes, thereby, rotation of said second gear will drive the rack and thus drive the

first rail; said first rail is engaged to the driving head (see figure 7 below for all limitations not explicitly labeled).

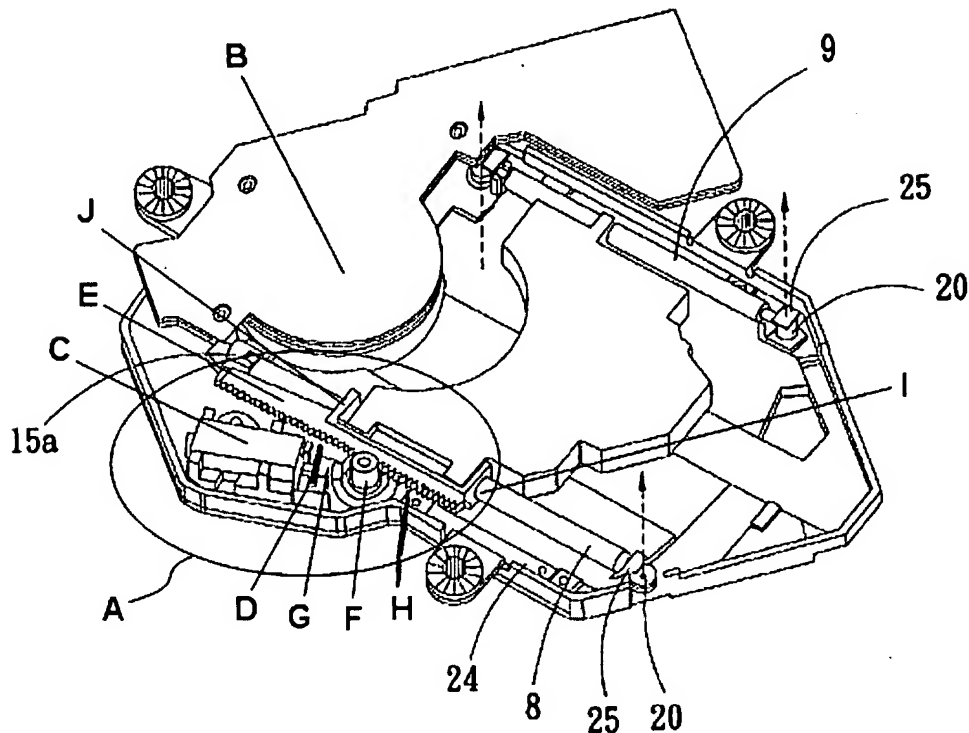


FIG. 7

However, Lu fails to disclose where the movement for disk player further comprises:

- a ferrite substrate for mounting disk driving motor; and

- at least one driving motor control circuit disposed outside said ferrite substrate.

In the same field of endeavor, Watanabe discloses where the movement for disk player further comprises:

- a substrate for mounting disk driving motor (base portion 10a in figure 13); and

- at least one driving motor control circuit disposed outside said ferrite substrate ("it is

- necessary that the electrical parts of the moving unit are electrically connected to a printed circuit board 44 arranged on the chassis 10 in order to operate the drive

unit 21; the printed circuit board 44 includes a signal processing circuit used to process a reproducing signal output from the pickup unit 5, and a control circuit used to control the operations of the disk motor 10 and the pickup moving motor 25" (col. 12, lines 3-10 and figure 13)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a substrate with a motor control circuit disposed outside it, as taught by Watanabe, for the purpose of providing a disk device which includes a flexible printed circuit cable having a simple structure that provides a small height for the disk device (col. 2, lines 47-50).

Additionally, Lu also fails to disclose where the substrate for mounting the disk driving motor is a ferrite substrate. In the same field of endeavor, the AAPA discloses where the substrate for mounting the disk driving motor is a ferrite substrate ("a conventional movement for disk player has a control PC board and a motor installed in a big-sized ferrite substrate" (page 1, lines 9-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted a motor on a ferrite substrate, as taught by the AAPA, for the purpose of providing a high precision device (page 1, lines 9-13).

Regarding claim 7, Lu discloses everything claimed, as applied to claim 6. However, Lu fails to disclose where the movement for disk player further comprises a signal bus line connected between said ferrite substrate and said disk driving motor.

In the same field of endeavor, Watanabe discloses where the movement for disk player further comprises a signal bus line connected between said ferrite substrate and said disk driving motor ("the electrical connections between the electrical parts of the moving unit and the

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printed circuit board 44 are accomplished by a flexible printed circuit (FPC) cable 45" (col. 12, lines 14-16 and figure 3)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have linked the substrate and motor, as taught by Watanabe, for the purpose stated in claim 6.

Regarding claim 8, Lu discloses everything claimed, as applied to claim 6. Additionally, Lu discloses where the movement for disk player wherein said driving source of said moving mechanism is a motor (element C in figure 7).

Regarding claim 9, Lu discloses everything claimed, as applied to claim 6. However, Lu fails to disclose where the movement for disk player wherein said control circuit is made in a form of a printed circuit board.

In the same field of endeavor, Watanabe discloses where the movement for disk player wherein said control circuit is made in a form of a printed circuit board (see citation in claim 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the control circuit in the form of a printed circuit board, as taught by Watanabe, for the purpose stated in claim 6.

Response to Arguments

12. Applicant's arguments with respect to claims 6-9 have been considered but are moot in view of the new ground(s) of rejection. Additionally, the examiner acknowledges Applicant's authorization to amend the claims to place them in condition for allowance. However, after reviewing Applicant's specification in light of the prior art of record, the examiner has not been able to find allowable subject matter to be added to the claims.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. This action is a **final rejection** and is intended to close the prosecution of this application. Applicant's reply under 37 CFR 1.113 to this action is limited either to an appeal to the Board of Patent Appeals and Interferences or to an amendment complying with the requirements set forth below.

If applicant should desire to appeal any rejection made by the examiner, a Notice of Appeal must be filed within the period for reply identifying the rejected claim or claims appealed. The Notice of Appeal must be accompanied by the required appeal fee of \$250.

If applicant should desire to file an amendment, entry of a proposed amendment after final rejection cannot be made as a matter of right unless it merely cancels claims or complies with a formal requirement made earlier. Amendments touching the merits of the application which otherwise might not be proper may be admitted upon a showing a good and sufficient reasons why they are necessary and why they were not presented earlier.

A reply under 37 CFR 1.113 to a final rejection must include the appeal from, or cancellation of, each rejected claim. The filing of an amendment after final rejection, whether or not it is entered, does not stop the running of the statutory period for reply to the final rejection unless the examiner holds the claims to be in condition for allowance. Accordingly, if a Notice of Appeal has not been filed properly within the period for reply, or any extension of this period obtained under either 37 CFR 1.136(a) or (b), the application will become abandoned.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 8:30 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan Danielsen
03/27/2006

ND


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SUPERVISORY PATENT EXAMINER